

WO 2004/027770 A1

(12)特許協力条約に基づいて公開された国際出願

(19)世界知的所有権機関
国際事務局(43)国際公開日
2004年4月1日 (01.04.2004)

PCT

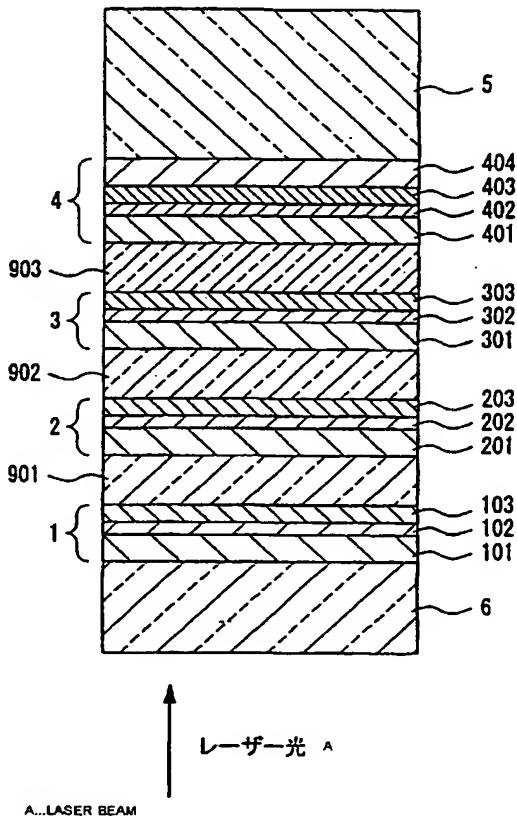
(10)国際公開番号
WO 2004/027770 A1

- (51) 国際特許分類⁷: G11B 7/24, 7/26
- (21) 国際出願番号: PCT/JP2003/011809
- (22) 国際出願日: 2003年9月17日 (17.09.2003)
- (25) 国際出願の言語: 日本語
- (26) 国際公開の言語: 日本語
- (30) 優先権データ:
特願2002-271122 2002年9月18日 (18.09.2002) JP
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- (81) 指定国(国内): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS,

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(54) Title: OPTICAL INFORMATION RECORDING MEDIUM AND PRODUCTION METHOD THEREFOR

(54)発明の名称: 光学情報記録媒体とその製造方法



(57) Abstract: An optical information recording medium including at least m information layers (m; an integer of at least 2), each information layer including a recording layer that irreversibly changes between an A state and a B state optically different from each other. When m information layers are counted as 1st to m-th information layers with one closest to a laser beam incident side first, a recording layer contained in a j-th information layer (j; an integer satisfying $1 \leq j \leq m-1$) is a j-th recording layer, and when the transmittance of the j-th information layer when in an A state is T_{Aj} (%) and the transmittance of the j-th information layer when in a B state is T_{Bj} (%), the j-th information layer satisfies the relation, $0 \leq |T_{Aj}-T_{Bj}| / (T_{Aj}, T_{Bj})_{max} \leq 0.10$ (where $(T_{Aj}, T_{Bj})_{max}$ is a value given by whichever is larger, T_{Aj} or T_{Bj}). In addition, at least one recording layer out of 1st to (m-1)-th recording layers is formed of a material different in complex refractive index ($n - ik$, where n is refractive index and k extinction factor) from that of an m-th recording layer.

(57) 要約: 本発明の光学情報記録媒体は、少なくともm層(mは、2以上の整数である。)の情報層を含み、各情報層は、光学的に互いに異なる状態Aと状態Bとの間を非可逆的に変化する記録層を含む。m層の情報層をレーザー光入射側から第1~第mの情報層とした場合、第jの情報層(jは、 $1 \leq j \leq m-1$ を満たす整数である。)に含まれる記録層を第jの記録層、第jの記録層が状態Aであるときの第jの情報層の透過率を T_{Aj} (%)、第jの記録層が状態Bであるときの第jの情報層の透過率を T_{Bj} (%)とすると、第jの情報層は $0 \leq |T_{Aj}-T_{Bj}| / (T_{Aj}, T_{Bj})_{max} \leq 0.10$ (但し、 $(T_{Aj}, T_{Bj})_{max}$ とは、 T_{Aj} と T_{Bj} のうち大きい方の値のことである。)の関係を満たす。さらに、第1~第m-1の記録層のうち少なくとも1つの記録層が、第mの記録層と複素屈折率(屈折率をn、消衰係数をkとしたときの $n - ik$)の異なる材料にて形成されている。



LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG,
SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
VC, VN, YU, ZA, ZM, ZW.

OAPI 特許 (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
ML, MR, NE, SN, TD, TG).

- (84) 指定国(広域): ARIPO 特許 (GH, GM, KE, LS, MW, MZ,
SD, SL, SZ, TZ, UG, ZM, ZW), ユーラシア特許 (AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM), ヨーロッパ特許
(AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB,
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添付公開書類:

- 國際調査報告書

2 文字コード及び他の略語については、定期発行される
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のガイダンスノート」を参照。

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/11809

A. CLASSIFICATION OF SUBJECT MATTER
Int.Cl⁷ G11B7/24, 7/26

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ G11B7/24, 7/26

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1922-1996	Toroku Jitsuyo Shinan Koho	1994-2003
Kokai Jitsuyo Shinan Koho	1971-2003	Jitsuyo Shinan Toroku Koho	1996-2003

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2002-133712 A (Matsushita Electric Industrial Co., Ltd.), 10 May, 2002 (10.05.02), Full text; all drawings & EP 1180767 A2	1-17
A	JP 2002-251778 A (Matsushita Electric Industrial Co., Ltd.), 06 September, 2002 (06.09.02), Full text; all drawings & EP 1215669 A2	1-17
A	JP 2002-230828 A (Pioneer Electronic Corp.), 16 August, 2002 (16.08.02), Full text; all drawings & EP 1229528 A2	1-17

 Further documents are listed in the continuation of Box C. See patent family annex.

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"A"	document defining the general state of the art which is not considered to be of particular relevance
"E"	earlier document but published on or after the international filing date
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"P"	document published prior to the international filing date but later than the priority date claimed
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"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"&"	document member of the same patent family

Date of the actual completion of the international search 19 November, 2003 (19.11.03)	Date of mailing of the international search report 09 December, 2003 (09.12.03)
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Name and mailing address of the ISA/ Japanese Patent Office	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/11809

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim N°.
A	JP 2000-235733 A (Sony Corp.), 29 August, 2000 (29.08.00), Full text; all drawings (Family: none)	1-17